IN THE CLAIMS:

Please cancel claims 1-9, without prejudice; and substitute amended claims 10-11 and add new claims 12-27, as follows:

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10. (Amended) A laser microscope which irradiates a sample with a laser light that includes a plurality of emission wavelengths through an objective lens, and which detects a fluorescent light from the sample, said laser microscope comprising:

an optical fiber configured to guide said laser light;

a collimator lens configured to collimate said laser light guided by the optical fiber;

a beam splitter configured to split a part of said laser light collimated by the collimator lens;

a spectral resolution section configured to spectrally resolve said laser light split by the beam splitter;

a converging lens configured to converge the laser light spectrally resolved by the spectral resolution section;

a light receiving element array configured to receive the laser light converged by the converging lens; and

a controller configured to receive an output signal of the light receiving element array and to control said laser light for each of said emission wavelengths.

11. (Amended) The laser microscope according to claim 10, wherein said collimator lens, said beam splitter, said spectral resolution section, said converging lens, and said light receiving element array are formed in one block, and the block is attachable to and detachable from a main body of said laser microscope.

12. (New) A laser microscope which irradiates a sample with a laser light that includes a plurality of emission wavelengths through an objective lens, and which detects a fluorescent light from the sample, said laser microscope comprising:

a spectral resolution section configured to spectrally resolve said laser light;

a light receiving element array that includes a plurality of light receiving elements configured to receive said laser light spectrally resolved by the spectral resolution section such that each emission wavelength of said spectrally-resolved laser light is respectively received by one of said light receiving elements; and

a controller that is configured to receive an output signal of the light receiving element array and to control said laser light for each of said emission wavelengths.

13. (New) The laser microscope according to claim 12, wherein said spectral resolution section comprises one of a prism, a diffraction grating, and a beam splitter.

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14. (New) The laser microscope according to claim 12, wherein said light receiving element array comprises one of a split photodiode and a solid-state image sensing device.

15. (New) The laser microscope according to claim 12, further comprising an optical fiber for guiding said laser light into a main body of the laser microscope.

16. (New) The laser microscope according to claim 12, further comprising an optical fiber for guiding said laser light into a main body of the laser microscope, and wherein said spectral resolution section and said light receiving element array are disposed on a light emission side of said optical fiber.

17. (New) The laser microscope according to claim 12, wherein said controller receives the output signal of said light receiving element array and simultaneously controls respective light intensities of the plurality of emission wavelengths of said laser light to be constant.

18. (New) The laser microscope according to claim 12, wherein said controller comprises:

a control unit configured to receive the output signal of said light receiving element array and to output a control signal for simultaneously setting respective light intensities of the plurality of emission wavelengths of said laser light to be constant; and

an acousto-optical element, disposed on an optical path of said laser light, configured to receive said control signal output by said control unit and to set the respective light intensities of the plurality of emission wavelengths of said laser light to be constant.

19. (New) The laser microscope according to claim 12, wherein a converging lens is disposed between said spectral resolution section and said light receiving element array, and said converging lens is configured to converge the spectrally resolved laser lights on said light receiving element array for the respective emission wavelengths.

20. (New) The laser microscope according to claim 12, further comprising a beam splitter configured to split said laser light and guide a part of said laser light to the spectral resolution section.

21. (New) A laser microscope which irradiates a sample with a laser light that includes a plurality of emission wavelengths through an objective lens, and which detects a fluorescent light from the sample, said laser microscope comprising:

a spectral resolution section configured to spectrally resolve said laser light;

a light receiving element array configured to receive said laser light spectrally resolved by the spectral resolution section;

a controller configured to receive an output signal of the light receiving element array and to control said laser light for each of said emission wavelengths; and

a beam splitter configured to split said laser light and guide a part of said laser light to the spectral resolution section;

wherein the spectral resolution section comprises one of a prism, a diffraction grating and a beam splitter.

22. (New) The laser microscope according to claim 21, wherein said light receiving element array comprises one of a split photodiode and a solid-state image sensing device.

23. (New) The laser microscope according to claim 21, further comprising an optical fiber for guiding said laser light into a main body of the laser microscope.

24. (New) The laser microscope according to claim 21, further comprising an optical fiber for guiding said laser light into a main body of the laser microscope, and wherein said spectral resolution section and said light receiving element array are disposed on a light emission side of said optical fiber.

25. (New) The laser microscope according to claim 21, wherein said controller receives the output signal of said light receiving element array and simultaneously controls respective light intensities of the plurality of emission wavelengths of said laser light to be constant.

26. (New) The laser microscope according to claim 21, wherein said controller comprises:

a control unit configured to receive the output signal of said light receiving element array and to output a control signal for simultaneously setting respective light intensities of the plurality of emission wavelengths of said laser light to be constant; and

an acousto-optical element, disposed on an optical path of said laser light, configured to receive said control signal output by said control unit and to set the respective light intensities of the plurality of emission wavelengths of said laser light to be constant.

27. (New) The laser microscope according to claim 21, wherein a converging lens is disposed between said spectral resolution section and said light receiving element array, and said converging lens is configured to converge the spectrally resolved laser lights on said light receiving element array for the respective emission wavelengths.